California's Water System and the Sacramento-San Joaquin Delta

1:30 p.m.
Thursday, October 4, 2007
State Capitol, Room 4202

B A C K G R O U N D M A T E R I A L

The Sacramento-San Joaquin Delta – and therefore California's water system – is in crisis. As the literal and figurative heart of the California water system, statewide water supply reliability suffers when the Delta suffers, as it has in recent years. The CALFED Bay-Delta Program has made little progress. The threat of Delta levee collapse is growing, threatening the drinking water supply for more than 24 million Californians. The ecosystem is collapsing. This year, both state and federal courts have ordered changes to state and federal water project exports due to the severe decline in the delta smelt. A committee of cabinet members is required to deliver a new strategic vision for the Delta in 2008, relying on the recommendations of the Administration's Blue Ribbon Task Force on Delta Vision.

In light of these recent events and his recent efforts to obtain approval of bond funding for new surface reservoirs, the governor, on September 11, 2007, called a special session of the Legislature to address four issues related to California water resources:

(1) protection and restoration of the Sacramento-San Joaquin Delta
(2) improvement of the water management system, including surface storage and conveyance
(3) appropriations to improve water resource management
(4) placement of a general obligation bond or lease revenue bond on the ballot

Background

The San Francisco Bay/Sacramento-San Joaquin Delta (Delta) ecosystem is the most valuable estuary ecosystem on the west coast of North or South America—a natural resource of hemispheric importance. Created by the confluence of the Sacramento and San Joaquin rivers as they flow into San Francisco Bay from the north and south, respectively, the estuary is a maze of tributaries, sloughs, and islands. It contains the largest brackish estuarine marsh on the West Coast. The 738,000-acre Delta ecosystem—the largest wetland habitat in the western United States—supports more than 750 wildlife species and more than 120 species of fish, as well as one of the state's largest commercial and recreational fisheries. The Delta estuary also provides migration corridors for two-thirds of the state's salmon and nearly half of the waterfowl and shorebirds along the Pacific Flyway.

The Delta also serves as the heart and a critical crossroads of California's water supply and delivery infrastructure. California's precipitation falls predominantly north of and upstream from the Delta, while much of the state's urban and agricultural water uses occur south of the Delta. The state's two major water projects, the federal Central Valley Project (CVP) and California's State Water Project (SWP), store water in major reservoirs upstream from the Delta, convey water through the Delta, and export the Delta's water south from project pumps in the south Delta. Southern California relies on the Delta for 30% of its water supply, while the San Francisco Bay Area relies on the Delta for 33% of its supply. As the water flows from the Sierra toward the Delta, cities and farmers draw water from the system.

The Delta developed over millions of years, as the Sacramento and San Joaquin Rivers deposited sediment and created seasonal islands of peat soils. Just after statehood, farmers gained ownership of these islands by building bigger levees to create islands that survived the winter and produced a rich agricultural abundance. The downside to that agriculture is that these fertile peat soils oxidized and subsided, leading to islands now lying as much as 30 feet below the adjacent water level.

The Delta's value as a water conveyance system was recognized when the Legislature adopted the California Water Plan in 1933, which provided for storage of abundant Northern California water in Shasta Reservoir, Delta water exports to certain farmers relying on the San Joaquin River, and damming/transfer of San Joaquin River water south to the Tulare and Kern River Basins. The design included a "Delta Cross-Channel" that diverted clean Sacramento River water into the Central Delta, so it would flow to water export pumps in the southern Delta. The Federal Government adopted this plan and created the Central Valley Project, as California lacked funding to implement its plan. Then, in the 1950's, the State started developing its own "Feather River Project," which turned into the State Water Project that transports water to the Bay Area, Tulare Lake Basin, Kern County and Southern California.

Timeline of Delta Development

1850	Statehood/Start of "Reclamation" – building levees to create islands
1933	Legislature adopts California Water Plan
1955	Delta Cross-Channel completed – fresh water goes to Central Delta
1959	Delta Protection Act I – water protection
1960	Voters approve $175 million in bonds for State Water Project
1978	Delta water quality standards adopted
1987-94	Major drought occurs – fisheries decline
1992-94	Water projects pumps temporarily shut down due to federal ESA
1992	Delta Protection Act II – Land-use Protection
1994	Bay-Delta Accord re: Delta water quality standards
1995	SWRCB adopts Delta Water Quality Control Plan (WQCP)
1999	Water project pumps temporarily shut down due to federal ESA
2000	SWRCB Implements Delta WQCP
	CALFED Bay-Delta Program "Record of Decision"
2005	DFG reports Delta fisheries/ecosystem decline
2006	State court upholds 1995 Delta Water Quality Control Plan
2007	State and federal courts orders changes in water project operations

Timeline of Legal Actions in Sacramento-San Joaquin Delta

1986: *United States v. SWRCB:* State court rules SWRCB Delta water quality standards as insufficient protection for fish, but keeps standards in place as SWRCB develops new standards.

1989: National Marine Fisheries Service (NMFS) lists Central Valley fall-run salmon as threatened under the federal Endangered Species Act. DFG later lists salmon under state ESA.

1991: US Environmental Protection Agency (USEPA) declares state Delta water quality standards invalid, as insufficient protection for Delta fishery.

1992: NMFS issues first biological opinion on salmon and DFG later adopts federal opinion. DWR shuts down SWP Delta export pumps, based on DFG request to reduce "take" of salmon.

1993:
- DWR unilaterally continues complying with NMFS biological opinion after its expiration.
- Governor Wilson asks SWRCB to withdraw new draft Delta water quality standards.
- U.S. Fish & Wildlife Service (FWS) and DFG list delta smelt as threatened under federal and state ESA statutes. FWS issues first biological opinion for delta smelt, but DFG never adopts the delta smelt opinion under state ESA.
- Federal court orders USEPA to prepare federal water quality standards for the Delta.

1994:
- After substantial federal-state conflict, federal and state agencies sign agreement to cooperate on development of new Delta water quality standards.
- Governor Wilson and Secretary of the Interior Bruce Babbitt sign "Bay-Delta Accord" – on court deadline day for new federal Delta water quality standards – providing for adoption of new state standards. Water users and other Delta stakeholders countersign Accord.

1995:
- NMFS and FWS issue new biological opinions based on new Delta water quality standards from the Accord.
- SWRCB adopts Delta Water Quality Control Plan (WQCP), accepting water projects commitment to comply with new standards.
- San Joaquin River tributary water districts sue SWRCB over WQCP, in order to avoid any requirement of their compliance. Suit settled because only state-federal projects comply.

1998: SWRCB begins hearings on how to implement 1995 Delta water quality standards.

1999:
- Central Valley Project (CVP) and State Water Project (SWP) Delta export pumps shut down in the spring and late fall after exceeding take limits for ESA-listed fish.
- Federal Judge Oliver Wanger (E.D. Cal./Fresno) issues first of several opinions regarding Congressional allocation of 800,000 acre-feet of federal CVP water to the environment.

2000:

- SWRCB Decision 1641 (2000) implements 1995 Delta WQCP by requiring federal-state water project compliance and San Joaquin River Agreement for tributaries. Lawsuits filed.
- CALFED Bay-Delta Program Record of Decision executed, including federal biological opinions. CALFED "Environmental Water Account" initiated.

2001: Court of Federal Claims rules that the Federal Government committed a taking of SWP contractor water rights in its 1992-94 implementation of the federal ESA in the Delta. Bush Administration does not appeal decision and settles lawsuit for $16.7 million, ignoring objections from the California Attorney General and the Schwarzenegger Administration that the federal judge incorrectly interpreted California law.

2005:

- DFG reports substantial decline in Delta fishery and ecosystem at Assembly hearing.
- At Senate hearings, DWR cannot identify any permit to "take" delta smelt under state law, but claims "patchwork" of compliance with state ESA.
- New federal biological opinions issued, in order to allow Bureau of Reclamation to sign new long-term contracts for water deliveries from the CVP.
- State and federal ESA lawsuits filed.

2006: State appeals court substantially upholds SWRCB Decision 1641 implementing the 1995 Delta WQCP.

2007:

- State court judge (Alameda Co.) rejects DWR's "patchwork" defense, ruling that DWR has not complied with state ESA. Orders pumps shut down in 60 days, but appeal stays order.
- Judge Wanger holds FWS delta smelt biological opinion invalid, requires parties to present proposals for remedies. At end of remedies hearing on delta smelt, Judge orally orders certain actions to protect delta smelt pending completion of a new biological opinion and directs parties to prepare a written order (August 31).
- Judge Wanger holds hearing on NMFS biological opinion on salmon protection (October 3).